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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/754,724	01/12/2004	Morihito Notani	1614.1377	6091
21171 7590 08/06/2007 STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			EXAMINER TSEGAYE, SABA	
			ART UNIT 2616	PAPER NUMBER
			MAIL DATE 08/06/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/754,724

Applicant(s)

NOTANI ET AL.

Examiner

Saba Tsegaye

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 01/12/04
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-7, 9 and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Kimura et al. (US 2003/0233579 A1).

Regarding claim 1, Kimura discloses a transmission apparatus, comprising:

an aggregate-side interface unit (fig. 1; receiving unit (511, 512); see paragraph, 0075) coupled to an optical transmission line (20-1, 20-2; fig. 2);

a cross-connect unit (SONET apparatus 21; fig. 1) which performs cross connect with respect to a synchronized digital signal supplied from the aggregate-side interface unit (511, 512); and

a network signal-processing unit (11), which switches the synchronized digital signal in a unit of a network signal as the synchronized digital signal is supplied from the cross-connect unit (0063;0067).

Regarding claim 2, Kimura discloses, in fig. 1, the transmission apparatus wherein the network signal-processing unit (11) includes:

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a network signal-extracting unit (221, 222), which extracts a network signal from the synchronized digital signal supplied from the cross-connect unit (21; 561, 562);

a network signal switching unit (120) which switches the extracted network signal (0067); and

a mapping unit (131, 132) which maps the network signal switched by the network signal switching unit (120) onto a synchronized digital signal for transmission to the cross-connect unit (21).

Regarding claim 3, Kimura discloses the transmission apparatus further comprising a tributary-side interface unit, which is connected to the cross connect unit, and interfaces one of an asynchronous digital signal and a network signal (0127).

Regarding claim 4, Kimura discloses the transmission apparatus wherein the network signal processing unit further includes an add/drop unit which drops the network signal supplied from the network signal switching unit, and adds a network signal supplied from an exterior to the network signal switching unit (0127-0128).

Regarding claim 5, Kimura discloses the transmission apparatus wherein the network digital processing unit further includes a flow monitoring and adjusting unit which monitors and adjusts an amount of flow of the synchronized digital signal supplied from the cross-connect unit (0027; 0106).

Regarding claim 6, Kimura discloses the transmission apparatus wherein the tributary side interface unit extracts one of an asynchronous digital signal and a network signal from a synchronized digital signal supplied from the cross-connect unit for dropping to and exterior, and adds one of an asynchronous digital signal and a network signal supplied from the exterior (0127-0128).

Regarding claim 7, Kimura discloses the transmission apparatus wherein the network signal processing unit performs ring switching in a LAN by use of RPR function (see fig. 2; 0057).

Regarding claim 9, Kimura discloses the transmission apparatus wherein the network signal is a RPR signal (see figs. 1 and 2; 0057).

Regarding claim 10, Kimura discloses the transmission apparatus wherein the cross-connect unit and the network signal-processing unit are connected through RPR signal (see fig. 1).

3. Claims 1, 3 and 6-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Zadikian et al. (US 2006/0251419 A1).

Regarding claim 1, Zadikian discloses a transmission apparatus, comprising:  
an aggregate-side interface unit coupled to an optical transmission line (1020; fig. 10);

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a cross-connect unit (1005) which performs cross connect with respect to a synchronized digital signal supplied from the aggregate-side interface unit (0117); and

a network signal-processing unit, which switches the synchronized digital signal in a unit of a network signal as the synchronized digital signal is supplied from the cross-connect unit (0121).

Regarding claim 3, Zadikian discloses the transmission apparatus further comprising a tributary-side interface unit, which is connected to the cross, connect unit, and interfaces one of an asynchronous digital signal and a network signal (0121).

Regarding claim 6, Zadikian discloses the transmission apparatus wherein the tributary side interface unit extracts one of an asynchronous digital signal and a network signal from a synchronized digital signal supplied from the cross-connect unit for dropping to and exterior, and adds one of and asynchronous digital signal and a network signal supplied from the exterior (0121).

Regarding claim 7, Zadikian discloses the transmission apparatus wherein the network signal processing unit performs ring switching in a LAN by use of RPR function (0019; 0158).

Regarding claim 8, Zadikian discloses the transmission apparatus wherein the synchronized digital signal is one of an SONET signal and an SDH signal (0054).

Regarding claim 9, Zadikian discloses the transmission apparatus wherein the network signal is a RPR signal (0091).

*Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kimura et al.

Kimura discloses all the claim limitations as stated above, except for SDH signal.

SDH is a standard that is used in Europe by the ITUT-T and SONET equipment is generally used in North America.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add SDH signal in the SONET system of Kimura in order to provide a compatible system with the rest of world.

*Conclusion*

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bradford et al. (US 2006/0120719 A1) discloses a system for link discovery and verification using loss of light.

Trudel et al. (US 2004/0190444 A1) discloses shared MESH signaling method and apparatus.

Zalevsky et al. (US 2003/0021519 A1) discloses a method and device for polarization-based all-optical switching.

Wakai et al. (US 2004/0208554 A1) discloses packet/TDM integrated node apparatus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saba Tsegaye whose telephone number is (571) 272-3091. The examiner can normally be reached on Monday-Friday (7:30-5:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached on (571) 272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Saba Tsegaye  
Examiner  
Art Unit 2616

ST  
August 2, 2007

  
WING CHAN 8/2/07  
SUPERVISORY PATENT EXAMINER